



# Data and feedback from the field

## Testing a cost-effective, mobile tech solution

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THE ENORMOUS GLOBAL GROWTH OF MOBILE PHONE ACCESS presents an opportunity for funders, such as philanthropies and other development agencies, to easily connect, communicate, and listen to their clients and end-users. As shown by a pilot conducted by The Rockefeller Foundation with its grantee, Viamo, a well-designed interactive voice response (IVR) mobile survey can result in fast, cost-effective and, importantly, actionable feedback from the field, even from the most distant and remote areas. And, while mobile data collection will not replace the more face-to-face, text, or online survey approaches critical to measurement and evaluation data gathering, it does add another analytical tool organizations can use to quickly assess what is and is not working in delivering their results.

# Overview

In mid-2019, The Rockefeller Foundation and its grantee, Viamo, a development-focused mobile communication service provider, piloted interactive voice response (IVR) mobile surveys across YieldWise – an initiative aimed at reducing post-harvest loss. The purpose of the pilot was to gather stakeholder feedback from farmers across the initiative’s three value chains: tomato in Nigeria, maize in Tanzania, and mango in Kenya. The first step called for developing a series of five-question surveys (coined “micro-surveys”) to deploy to farmers who had received YieldWise support during the 2018–2019 crop season. In addition to learning if and how YieldWise end-users were or were not benefiting from the initiative, the results of the pilot would enable the Foundation to test mobile data collection as an alternative to more traditional data-gathering approaches and, in turn, share learning with philanthropies and funding agencies on how and why this this approach to gathering stakeholder voice might be appropriate.

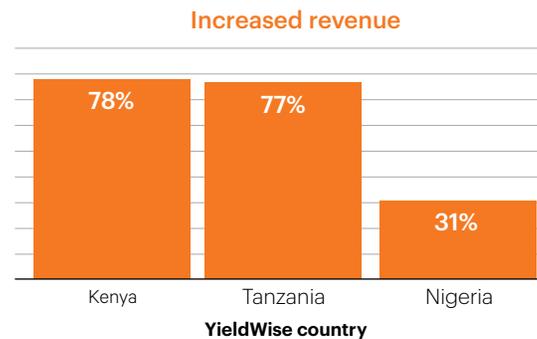
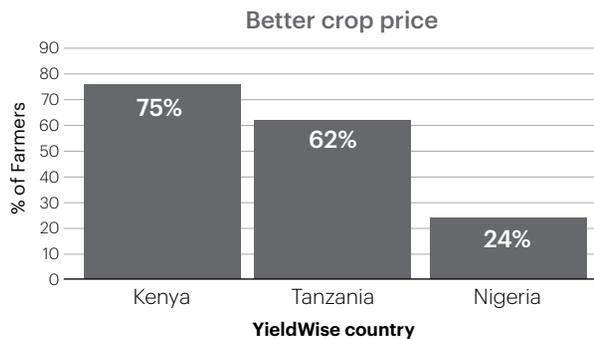
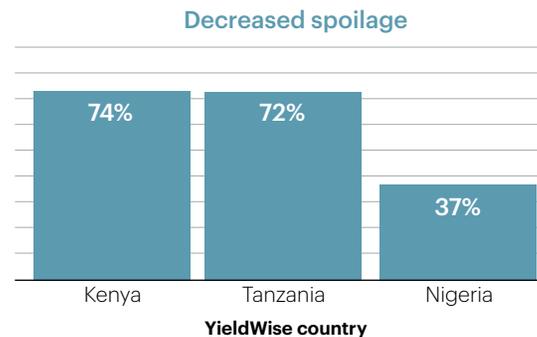
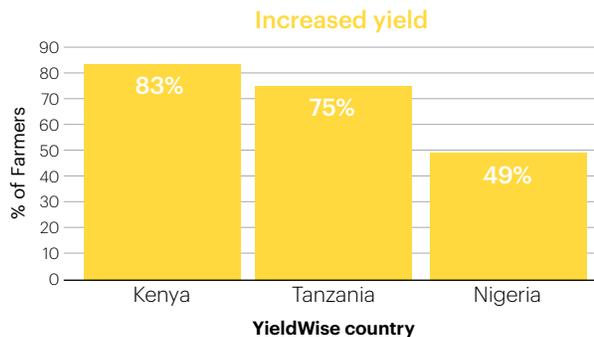


## Results of YieldWise survey

The micro-surveys were sent to the mobile phones of farmers in each YieldWise country. In total, 1,431 participated. Guaranteed security and anonymity, their responses were shared with The Rockefeller Foundation in real time through a dashboard link, with the raw results enabling additional analysis. Of the respondents across all three countries:

- **84%** said they would recommend the YieldWise services to others
- **63%** said their revenue increased due to support from YieldWise
- **69%** reported an increase in crop yields
- **61%** reported a decrease in crop spoilage.

Additional analysis showed that the main services farmers received from YieldWise were access to training and technology. We also learned about farmer’s perceptions of changes in their well-being. As shown on the figure on the left, greater improvements were seen across the maize and mango value chains than in the tomato value chain.



# The What, How, and Why of IVR...

## What we did

IVR surveys are pre-recorded mobile voice calls that can be made to the recipients, clients and end-users of a product or service – such as the farmers of the Yieldwise Initiative. The calls are typically short and unexpected so, to optimize for a high response rate, every IVR plan should include:

- an accurate and up-to-date list of those participating in the initiative along with their mobile numbers
- well thought out survey questions voiced in local languages that farmers will easily understand and can answer by pressing 1, 2, or 3 on their keypads.

## How we did it

### CHOOSING THE QUESTIONS



Viamo translates and contextualizes questions to coincide with the major social mores of a community—making them easily understandable to the recipients of the mobile calls.

For example, if the calls are going to a community with a primarily Swahili speaking population in East Africa, the questions are localized into the local Swahili dialect.

### DESIGNING THE SURVEY



Experience has shown that if a call goes on too long, the respondent might hang up without answering all of the questions. Thus, each survey was broken into micro-surveys –

3 parts of 5 questions each, 15 total. For completing each survey, respondents were offered a small incentive of extra phone minutes if they completed the questions. Even so, there was a slight drop-off in participants from survey to survey.

### CHOOSING WHOM TO CALL



The initial goal was to send the micro-surveys to 2,000 farmers in each of the YieldWise country settings: Kenya, Tanzania, and Nigeria. Local service providers have

responsibility for maintaining contact lists. While some providers had up-to-date lists, others had duplicates, errors, or inactive phone numbers. The response rate would have increased with better contact lists and if farmers had been notified during their training that they would be receiving a survey on their mobile phone about the training and services they received.

## Why it's useful

### TAKING ADVANTAGE OF NEW TECHNOLOGY



Studies have found that people are 10 times more likely to engage with IVR than non-voice surveys. The digital media offer philanthropies and development organizations myriad opportunities for innovative new directions in gathering data and feedback from the field. It gives the “surveyors” a great deal of control over survey design, and also access to raw data through an online dashboard link. The entire operation – design survey, deploy and receive results – can be finalized in around six weeks.

## IVR data collection: Process at a glance

### Develop survey



### Translate and record survey



### Field test and modify



### Deploy as robocalls to mobile phones



### Farmers respond to mobile survey



### Results received and analyzed



## ADJUSTING TO FARMERS' SITUATIONS



Having respondents answer survey questions via voice message rather than in-person data collection is not only extremely cost effective, it allows farmers the ability to provide feedback without needing to change their daily routine. It also allows those who are illiterate or have vision problems to participate, which would not be possible with online or text message surveys.

## GATHERING QUANTITATIVE INFORMATION



Each of the three micro-surveys sought a different level of information: i) who are the end users of YieldWise, ii) what services have they received, and iii) what difference has it made in their wellbeing. The approach does not allow for easily gathering qualitative answers. It is a better match for those looking for a reliable, low-cost way to gather timely quantitative data from remote rural areas for decision-making.

## WORKING CLOSER TO RESPONDENTS



Usually, philanthropies and other funding agencies work through grantees and/or partners who oversee field operations, and who often hire others who actually interact with the end-users of their initiatives. IVR enables philanthropies and other funding agencies to gather feedback, and close the feedback loop, more directly. That said, it should be noted that the data are self-reported and should be triangulated with other sources to verify.



## ANALYZING RAW DATA



Philanthropies and other funding agencies usually engage grantees or other partners to gather and analyze data from the field and present their results in a report. With IVR and other mobile approaches, organizations can also receive the end-users' anonymized answers directly from the field in the form of raw data. Access to the raw data provides a level of flexibility that is not usually available when receiving a more static report. This ability offers additional opportunities for innovative new directions in data analysis, for instance, when applying data science methods to analyze and visualize the data.

## About The Rockefeller Foundation

The Rockefeller Foundation advances new frontiers of science, data, policy, and innovation to solve global challenges related to health, food, power, and equity and economic opportunity. As a science-driven philanthropy focused on building collaborative relationships with partners and grantees, The Rockefeller Foundation seeks to inspire and foster large-scale human impact that promotes the well-being of humanity throughout the world by identifying and accelerating breakthrough solutions, ideas, and conversations. For more information, visit [www.rockefellerfoundation.org](http://www.rockefellerfoundation.org)

